



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/656,513	09/05/2003	Soren Eriksson	202-1416	8025	
28415	7590 04/20/2006		EXAMINER		
PRICE, HENEVELD, COOPER, DEWITT & LITTON, LLP			GIBSON,	GIBSON, ERIC M	
695 KENMOOR S.E. P. O. BOX 2567		ART UNIT	PAPER NUMBER		
GRAND RAPIDS, MI 49501-2567			3661		
			DATE MAILED: 04/20/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
,	10/656,513	ERIKSSON, SOREN				
Office Action Summary	Examiner	Art Unit				
	Eric M. Gibson	3661				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 02 Fe	Responsive to communication(s) filed on <u>02 February 2006</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)□ This	This action is <b>FINAL</b> . 2b) This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-20 is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	r.					
10)⊠ The drawing(s) filed on <u>05 September 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
<ol> <li>Certified copies of the priority documents have been received.</li> </ol>						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
;						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	4) Interview Summary Paper No(s)/Mail Da					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	5) Notice of Informal P	Patent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:					

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dominke et al. (US005991669A).

Per claim 1, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein a suspension coordinator subsystem (suspension; figure 3) is at a lower hierarchical level.

Per claim 2, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein the upward signals include availabilities of the mode of operation (column 4, lines 28-30).

Per claims 3 and 4, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower

Art Unit: 3661

hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein there is a request – response relationship between the two levels (column 4, lines 14-33).

Per claims 5 and 6, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein signals of vehicle measurements are available to both levels (110, 112, 126, 128; figure 1).

Per claim 7, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein the upward signals include status of the lower level (column 4, lines 28-30).

Per claim 8, Dominke '669 teaches a vehicle control system including a vehicle motion control subsystem (vehicle movement; figure 3), a suspension coordinator subsystem (suspension; figure 3) at a lower hierarchical level, wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33).

Art Unit: 3661

Per claim 9, Dominke '669 teaches that the upward signals include availabilities of the mode of operation (column 4, lines 28-30).

Per claims 10 and 11, Dominke '669 teaches a request – response relationship between the two levels (column 4, lines 14-33).

Per claims 12 and 13, Dominke '669 teaches signals of vehicle measurements available to both levels (110, 112, 126, 128; figure 1).

Per claim 14, Dominke '669 teaches that the upward signals include status of the lower level (column 4, lines 28-30).

Per claim 15, Dominke '669 teaches a method of controlling a vehicle including a hierarchical control system communicating between an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33) wherein a suspension coordinator subsystem (suspension; figure 3) is at a lower hierarchical level.

Per claim 16, Dominke '669 teaches that the upward signals include availabilities of the mode of operation (column 4, lines 28-30).

Per claims 17 and 18, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein there is a request – response relationship between the two levels (column 4, lines 14-33).

Art Unit: 3661

Per claims 19, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein signals of vehicle measurements are available to both levels (110, 112, 126, 128; figure 1).

Per claim 20, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein the upward signals include status of the lower level (column 4, lines 28-30).

### Response to Arguments

Applicant's arguments filed 2/2/2006 have been fully considered but they are not persuasive. Specifically, the relationship between the higher-level coordinator and the suspension subsystem as illustrated in figure 3 of the Dominke '669 reference shows a higher-lower hierarchical structure. The description of the interrelationship between the higher level and lower level system identifies that lower levels act as separate hierarchical subsystems with the systems under their control in the figure 3 relationship (see for example, column 6).

Art Unit: 3661

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Gibson whose telephone number is (571) 272-6960. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**EMG** 

THOMAS G. BLACK ANNE.

THOMAS G. BLACK

THOMAS GROUP

THOM